

Remarks/Arguments

Reconsideration of this application is requested.

Claim Status

Claims 1-5 were originally allowed and issued in U.S. patent 5,818,249. Claims 6-16 were added in the originally-filed reissue application. Claims 6-12 were amended in the Supplemental Amendment filed on October 4, 2005. By this amendment, claims 6 and 10-12 are amended a second time, and claims 13 and 14 are amended a first time. Claims 6-16 remain pending.

Claim Amendments

The following amendments are made to the claims:

In claim 6, the word "signal" is deleted where it follows "power supply", and the two occurrences of "concurrently" are deleted at the beginning of the last two paragraphs of the claim.

In claim 10, the word "signal" is deleted where it follows "power supply".

In claim 11, the word "signal" is deleted where it follows "power supply".

In claim 12, the word "signal" is deleted where it follows "power supply", and the phrase "and concurrent" is deleted from the last two paragraphs of the claims.

In claim 13, the word "signal" is deleted where it follows "power supply", and the phrase "and concurrent" is deleted.

In claim 14, the word "signal" is deleted where it follows "power supply", and the phrase "and concurrent" is deleted.

Claim Rejections – 35 USC 112, First Paragraph

Claims 6-16 are rejected under 35 USC 112, first paragraph, as failing to comply with the written description requirement. In particular, the Action asserts that there is no support in the original specification for the limitation of "concurrently supplying the independent test signals and power supply signal from the tester through the probe needles to a plurality of external terminals of the plurality of integrated circuit". The Action acknowledges that this step has a different scope from original claims 1-5 because the probe needles in claims 1-5

receive only test signals from the tester, and a response signal is provided from the probe needle to the tester. However, the Action asserts that the response signal is a response test signal picked up by the probe needles and provided to the tester for analyzing, and states "it appears that the response signal is not a power supply signal from the tester".

Applicant respectfully traverses the rejection. Independent claims 6 and 12 do not contain a recitation that the response signal is a power supply signal from the tester. Rather the claims require that the probe cards receive test signals and a power supply from a tester, and that the test signals and power supply are supplied from the tester through the probe needles to external terminals (or pads) of the integrated circuits being tested. Nowhere in the claims is there a recitation that the *response signal* from the integrated circuits is a power supply signal. For this reason, applicant believes this aspect of the rejection to be in error and therefore traverses the rejection.

Although applicant believes that the specification and drawings, taken together, provide support for the claims as previously presented, claims 6 and 10-14 are amended for purposes of clarity and to remove any possible issues regarding compliance with the written description requirement of 35 USC 112, first paragraph. In particular, the word "signal" is deleted where it follows "power supply", and the words "concurrently" and "concurrent" are deleted from the recitations of the supply of the test signal and power supply to the integrated circuit chips.

Clear support for the limitations of claims 6-16, as amended, is found at column 6, lines 43-59 and Figure 7. Here, the specification describes a probe card 15 having a substrate 20 comprised of seven layers 20-1 to 20-7. Probe contacts 21 are mounted on the first layer 20-1, and the second through seventh layers 20-2 to 20-7 include six different types of wires, *including power supply wires on the sixth layer 20-6*. Wires 37 provided on the second to seventh layers 20-2 to 20-7 extend through holes 39 to connect layers 20-2 to 20-7 to probe contacts 21. Probe contacts

21, in turn, receive from a tester the various signals to be sent through the wires on layers 20-2 to 20-7. As is clearly seen in Figure 7, the wires on layers 20-2 to 20-7 extend from wires 37 on the outer circumference of layers 20-2 to 20-7 to the probe needles in the center of substrate 20. The probe needles, in turn, contact the external terminals or pads of an integrated circuit that is being tested. Thus, as is recited in claims 6 and 12, test signals and a power supply are supplied from the tester through the probe needles to plurality of external terminals (or pads) of the integrated circuit.

While layer 20-6 of the substrate is described as including a power supply wire, and applicant believes that one of skill in the art would understand a power supply wire to be provided for the purposes of conveying a power supply signal, since the term "power supply signal" is not specifically used, it has been deleted from the claims. The recitation and drawing of a power supply wire, however, clearly provide written description support for the term "power supply", which remains in the claims as amended. In addition, while the description and drawings clearly establish that the power supply and test signals are independently supplied, and applicant believes that one of skill in the art would understand this configuration to allow concurrent supply of the test and power supply signals, since the terms "concurrent" and "concurrently" were not specifically used they have been deleted from the claims.

For these reasons, applicant submits that the rejection of claims 6-16 under 35 USC 112, first paragraph, should be withdrawn.

Reissue Oath/Declaration

The Action asserts that the reissue oath/declaration is defective for the same reasons as discussed above. That is, in view of the assertion that claims 6-16 were not supported by the written description, they also could not correct an error in original patent claims 1-5. In view thereof, claims 1-16 are rejected as based on a defective reissue oath.

The error in the reissue oath/declaration is described as:

The claims of U.S. patent 5,818,249 are defined in terms of signal lines carrying both a test signal and a response signal. This is unduly restrictive in that aspects of the invention can be practiced using other test methodologies. The newly presented claims do not include this error.

Claims 6-16, as amended, do not include the described error, and therefore correct the error. Since the claims are now in clear compliance with the written description requirement, as discussed above, they do define an error on which the reissue can be based. For these reasons, applicant submits that the objection to the reissue oath/declaration, and the rejection of claims 1-16 as based on a defective reissue oath, should be withdrawn.

Conclusion

This application is believed to be in condition for allowance. The examiner is invited to telephone the undersigned to resolve any issues that remain after entry of this amendment. Any fees due with this response, including extension of time fees, may be charged to our Deposit Account No. 50-1314.

Respectfully submitted,

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